

**IN THE UNITED STATES PATENT AND TRADEMARK OFFICE**

In re PATENT APPLICATION of:  
VERKAMA, Markku

Confirmation Number: 9392

Application No.: 09/830,028

Group Art Unit: 2617

Filed: August 15, 2001

Examiner: IQBAL, Khawar

Title: DIGITAL TELECOMMUNICATION SYSTEM

**ARGUMENTS SUBMITTED WITH PRE-APPEAL BRIEF CONFERENCE REQUEST**

**MS AF**

Commissioner for Patents  
P.O. Box 1450  
Alexandria, VA 22313-1450

Sir:

In response to the Final Office Action dated May 29, 2008 the period for response ending on August 29, 2008, and in connection with the accompanying Notice of Appeal and Pre-Appeal Brief Conference Request, the following remarks are submitted. Deposit Account authorization for any fees due with this Appeal has been separately provided.

Claims 1-17 are on Appeal, and claims 1 and 14 are independent. This Appeal has been filed in response to the *fourth* Final Office Action, mailed on May 29, 2008. In the interests of brevity, and the page limits of the Pre-Appeal Brief Conference Request, only the rejection of the independent claims will be addressed herein.

**Unpatentability Rejection over Tseng et al. in View of Navaro et al.**

Withdrawal of the rejection of claims 1-12 and 14-17 under 35 U.S.C. §103(a) as allegedly being unpatentable over Tseng et al (US 6,172,974) ("Tseng") in view of Navaro et al. (US 6,108,560) ("Navaro") is requested. The Examiner again has failed to make a *prima facie* case of unpatentability and does not recognize that the suggested combination does not teach or suggest all the claimed limitations, and that the motivation to combine the references in the manner suggested is deficient.

***Specific Deficiencies of Tseng Combined with Navaro with Respect to the Claims***

The applied art, either alone or in combination, does not disclose, teach or suggest a digital telecommunication system that includes, *inter alia*, "...a first centre...associated with a

calling terminal and including a first transcoder unit...a second centre...associated with a called terminal and including a second transcoder unit, wherein at least one of the first and second centres comprises a mobile switching center...*wherein the terminals are arranged to provide information regarding the supported speech codecs to their associated switching centres...wherein at least one of the first and second centres is configured to choose the speech codec used commonly by the calling and called terminals*, and wherein at least one of the first and second centres is configured to *establish call connections that bypass one or more of the transcoder units or to control the transcoder units to transmit encoded speech between the called and calling terminals without performing speech encoding operations so that speech is encoded and decoded only in the terminals*," as recited in previously-presented independent claim 1 (*emphasis* added).

Further, the applied art, either alone or in combination, does not disclose, teach or suggest a mobile switching centre in a digital telecommunication network wherein, *inter alia*, "the mobile switching centre is configured to perform handshaking with another centre associated with a called terminal, *the handshaking including indication of speech codecs supported by the calling terminal associated with the centre, the centre also being configured to choose the speech codec commonly used by the terminals*, and *the mobile switching centre is configured to connect a call connection that bypasses the transcoder unit or to control the transcoder unit to transmit the encoded speech without performing speech encoding operations in such a way that speech encoding and decoding are only performed in the calling or called terminal*," as recited in previously-presented independent claim 14 (*emphasis* added).

#### *Discussion of the Final Rejection over Tseng and Navaro*

The Examiner merely repeats his previous rejections, and incorrectly asserts that Tseng discloses at col. 4:33-37 that the terminals indicate their supported speech codecs to their associated switching centers MSC/BSC. *This assertion is clearly not true*. In the passages of Tseng cited by the Examiner, Tseng merely discloses that a MS includes a codec and either a BSC or a MSC also includes a codec. Accordingly, and *completely contrary to the Examiner's assertions, Tseng does not teach that a terminal would indicate its speech codecs to a switching center MSC*.

Tseng merely discloses a signaling method for achieving a tandem-free operation (TFO) in a mobile-to-mobile call (MMC) in a telecommunication system. The centers are arranged to

transmit capability signals to each other to indicate that a particular center is capable of transcoding (or cross transcoding, if needed). Then, the transcoders are bypassed by sending low frequency tone signals to the opposite centers.

The Examiner further argues that Tseng discloses that the terminals indicate their supported speech codecs to their associated switching centers by referring to the tones indicating the type of transcoding or cross transcoding during network setup (col. 5:33-65, col. 9:40-65). Applicant again traverses this clear mischaracterization of Tseng. *The cited passages of the Tseng reference merely disclose that the centers (i.e., MSC/BSCs) indicate to each other whether they are capable of transcoding, and then the transcoders are bypassed by sending LF tone signals to the opposite centers.*

Accordingly, *Applicant submits that Tseng is completely silent with respect to providing any teaching or suggestion of any activity in which a terminal would indicate its speech codecs to a switching center, or in which a terminal would even have occasion to indicate its speech codecs to a switching center.*

Since, in stark contrast to Applicant's variously claimed invention, Tseng does not disclose that a terminal would indicate its speech codecs to a switching center, it can be unambiguously concluded that *the terminals of Tseng also do not participate in the selection of inter-MSC coding, and are incapable of participating in the selection of inter-MSC coding.*

The Examiner correctly admits that Tseng does not disclose that at least one of the first and second centers is configured to choose the speech codec used commonly by the calling and called terminals, but incorrectly asserts that Navaro teaches this feature at col. 8:5 through col. 9:5. Applicant traverses this alleged teaching of Navaro.

Navaro makes it clear (see, e.g., col. 9:3-5) that *the choice of the codec is an internal process for the BSS (Base Station Subsystem)*, i.e., *the MSC does not participate in choosing the speech codec* used commonly by the calling and called terminals. Applicant submits that it is generally known that a base station system (BSS) comprises a base station controller (BSC), a plurality of base transceiver stations (BTS), and a transcoder and rate adapter unit (TRAU). Navaro further discloses that, for choosing a common codec, the BSC provides a list of codecs and the codec version of the MS to the TRAU (see col. 8:7-10). Then the TRAUs of the opposite sides negotiate with each other in order to find a common codec. Thus, *Navarro does*

***not disclose, teach or suggest any centers which would choose the speech codec used commonly by the calling and called terminals.*** Furthermore, Navaro does not teach, suggest, or even provide so much as a hint that the terminals would indicate their supported speech codecs ***to their associated switching centers, i.e., MSC's.***

Accordingly, a combination of Tseng with Navaro does not disclose, teach, or suggest all the limitations of the pending independent claims and, further, a person of ordinary skill in the art would not be motivated to combine Tseng with Navaro to arrive at Applicant's claimed invention, as discussed below.

This conclusion is supported by the fact that both Tseng and Navaro concentrate purely on tandem-free operation (TFO), and for the specific reason that the transcoders are ***always*** a part of the transmission path, and for a mobile-to-mobile call, they ***must*** be separately switched off.

Accordingly, since the applied art does not teach or suggest all the claimed limitations, reconsideration and allowance of independent claims 1 and 14 are respectfully requested. In addition, dependent claims 2-13 and 15-17 variously and ultimately depend patentable independent claim 1, and are submitted as being allowable at least on that basis, without further recourse to the patentable features recited therein.

#### ***Tseng “Teaches Away” from the Claimed Invention***

As further evidence of the impropriety of the Examiner's rejection, and even assuming, arguendo, that the applied art, either alone or in combination, teaches or suggests all the limitations recited in the independent claims (which it does ***not***), a person with skill in the art would not have a rational reason to combine Tseng with Navaro in the manner suggested by the Examiner, because Tseng teaches away from Applicant's invention as recited in independent claims 1 and 14. Only through the use of improper hindsight analysis would these references be looked upon to derive Applicant's novel and non-obvious invention, as claimed.

Even assuming that Tseng indicates its speech codecs to a switching center or that Tseng would even have occasion to indicate its speech codecs to a switching center, which it does not, ***such an indication would be futile in the system of Tseng,*** since Tseng discloses inter-system (GSM/TDMA/CDMA) TFO operations, in which the speech codecs of the terminals are system-***dependent,*** *i.e.* the respective switching center is ***always*** aware of speech codecs supported by the terminals. ***Hence, there clearly would be no need to indicate the speech codecs supported***

*by the terminals to the switching centers because they must already be known.* Further, since Tseng has no need for a terminal to indicate its speech codecs to switching center, it can be unambiguously concluded that the terminals of Tseng absolutely do **not** participate in the selection of inter-MSC coding, contrary to the recitations of Applicant's claimed invention.

In stark contrast, Applicant's invention as claimed in independent claim 1, for example, recites that the terminals are arranged to provide information regarding the supported speech codecs to their associated switching centers, and at least one of the first and second centers is configured to choose the speech codec used commonly by the calling and called terminals. Similar recitations pertain to independent claim 14. Accordingly, Applicant submits that Tseng would have lead a person skilled in the art away from the invention claimed in at least claims 1 and 14. Therefore, claims 1 and 14 should be allowed on this additional basis.

### Conclusion

Applicant submits that each of pending claims 1-17 in the present application is in immediate condition for allowance. An early indication of the same would be appreciated.

For any fees that are due during the pendency of this application, please charge Deposit Account Number 03-3975 from which the Undersigned Attorney is authorized to draw. The Commissioner for Patents is also authorized to credit any over payments to the above-referenced Deposit Account.

Date: July 29, 2008

Respectfully submitted,

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